During the following cycle of the machine, the contacts B_1 through B_4 and G_1 through G_4 and A_1 through A_4 are again contacted by the depending brush contacts **406** and **408** of the indexing arm **400** to drive the machine components, as aforedescribed. However, since it is necessary to deliver and apply a rectangular button to the surface of the highway, during this cycle of operation, as the brush contact **406** is brought into contact with the contact **434**, connected with the electromagnet **430** of the circuit **410**, the cam wheel **412** is indexed bringing the cam lobe **416** into engagement with the cam follower **418** for depressing the reeds and closing the normally open contacts GS, BS and AS. Continued indexing of the arm **400** again brings the contact **408** into engagement with the brush contact B_5 whereupon a circuit is completed between the bus bar **394**, through the circuit **410**, to a valve **380** connected with the actuator **308** of the brush **32** so that the rotor **262** is caused to engage the surface of the highway and remove the foreign material therefrom.

The next advancement of the arm **400** causes the contact **406** to engage the contact G_5 which serves to connect the bus bar **394** to the actuator **126** of the gate **118** for delivering to the ejector mechanism **150** a rectangular button while at the same time causing the ram **74** to be driven through the chamber **72** of the magazine subsection **36** for delivering another through the gated track to the gate **118** whereat the button is intercepted and retained for subsequent delivery during a subsequent cycle of the machine.

As the machine advances along the surface, the buttons are serially delivered by the button ejector mechanism **150** while the tire **236** serves to engage the upper surface thereof for seating the buttons positively in the globs of delivered adhesive applied by the adhesive applicator **176**.

Furthermore, in instances where the machine is being employed to deliver buttons to a surface having gentle curves, the brush is arcuately displaced in a horizontal direction about the pivot point **290** through an operation of the push-pull linkage **366**. It is important to note, however, in instance where the curves encountered are rather sharp, or for any other reason, the boom may be disconnected at the clevis **376** and the housing **280** of the brush fixed relative to the bracket **284** by screw-threaded studs **292**. The machine then functions as aforedescribed without the booms.

As the machine continues along the surface of the highway, the cycles are repeated in pairs of cycles with four circular buttons being applied during a first cycle, followed by four circular buttons and a rectangular button during the second cycle. Since the operation for each mechanism of the machine has herebefore been provided in conjunction with the description of the mechanism, a detailed description of the operation thereof is omitted at this point in the interest of brevity.

In view of the foregoing, it should be readily apparent that the present invention provides an automated lane-divider button applying machine particularly suited for use in applying lane-divider buttons at selected intervals along lane-divider lines of surfaced highways, and includes a fully automated system for cleaning selected areas, depositing globs of adhesive in the cleaned areas and applying circular and rectangular buttons, in predetermined order, in the applied adhesive.

Although the invention has been herein shown and described in what is conceived to be the most practical and preferred embodiment, it is recognized that departures may be made therefrom within the scope of the invention.

Having described by invention, what I claim as new and desire to secure by Letters Patent is:

1. An automated lane-divider button applying machine adapted to apply lane-divider buttons to selectively spaced areas of given surfaces, comprising:
   A. means adapted operatively to remove foreign matter from spaced areas of a given surface;
   B. adhesive applicator means for depositing a predetermined quantity of adhesive at each of the selected areas;
   C. button applicator means for delivering and seating lane-divider buttons within the deposited adhesive; and
   D. a mobile frame operatively supporting said means for displacement relatively to the spaced areas.

2. An automated lane-divider button applying machine, comprising:
   A. a mobile frame;
   B. a prime mover associated with the frame for driving said frame along a selected path of travel and over a surface;
   C. a steering mechanism for controlling directions of travel for said frame;
   D. a button depositing system mounted on said frame including,
      1. means defining a surface cleaner for cleaning areas of a button receiving surface;
      2. means defining an adhesive applicator for applying globs of adhesive to the cleaned areas; and
      3. means defining a button applicator for applying buttons to the applied globs of adhesive; and
   E. machine control and sequencing means including pneumatic actuators adapted to activate the surface cleaner, the adhesive applicator and the button applicator in a preselected sequence, whereby the machine is activated sequentially to clean surface areas for receiving globs of adhesive, to apply globs of adhesive to the areas and to apply buttons to the applied globs of adhesive.

3. The machine of claim **2** wherein the machine control and sequencing means includes a plurality of electrically activated pneumatic actuator control valve drive units and an electrical control circuit connected with the units adapted to couple the units with a source of electrical energy for achieving a selected actuation of the actuators for thereby imparting to the machine sequenced operations.

4. The machine of claim **3** wherein the timer includes:
   A. a driven rotor arm having a plurality of interconnected electrical contact brushes depending therefrom;
   B. circuit means continuously connecting a source of electrical energy to said brushes;
   C. a plurality of electrical contacts disposed within the path of the brushes adapted sequentially to be engaged thereby;
   D. electrical leads electrically connecting said contacts with said motors, whereby the motors are caused to be energized as the contact brushes are caused to engage the contacts; and
   E. drive means adapted to rotate the rotor arm at selected rates or rotation, whereby the hydraulic motors are sequentially and selectively connected with a source of electrical energy as the rotor arm is caused to be rotated by the drive means.

5. The machine of claim **4** wherein the rotor drive means includes:
   A. a wheel disposed in operative engagement with the given surface and adapted to be driven in rotation thereby;
   B. a cam plate operatively coupled with said wheel and adapted to be driven in rotation thereby; and
   C. a cam-driven indexing drive linkage coupled between the rotor arm and the cam plate for indexing the rotor arm at predetermined intervals of wheel rotation.

6. An automated lane-divider button applying machine adapted to be driven and sequentially operated for applying lane-divider buttons of the type including a supporting planar surface and an upper light-reflecting surface at predetermined intervals along the surface of a highway for thereby delineating highway traffic lanes, comprising:
   A. mobilized vehicle, including a steering mechanism and a prime mover adapted to be controlled by an operator for directing the machine along a given path above a selected surface of a given highway;
   B. a surface cleaner mounted on the vehicle and adapted to remove foreign material from selected areas of the surface;
   C. an adhesive applicator mounted on the machine adapted to apply globs of adhesive at each of the selected areas from which foreign matter has been removed;